

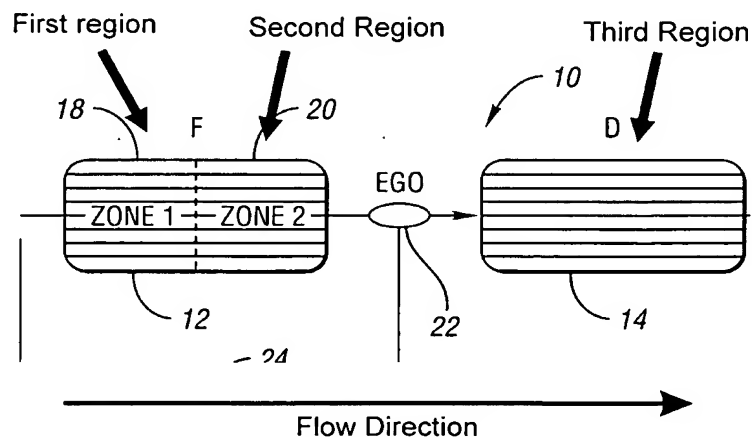
## **Remarks**

Claims 1-20 and 31-32 are pending in the present application and are rejected.

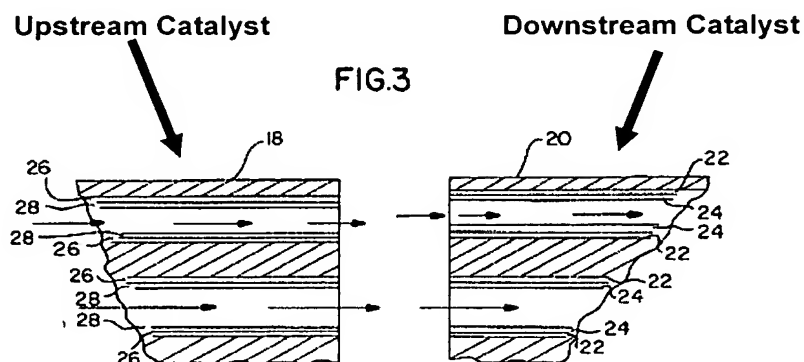
### **1. Claim Rejections Under 35 U.S.C. § 102**

Claims 1-20 and 31-32 are rejected under 35 U.S.C. § 102(b) as being anticipated by Sung. et al, U.S. Patent No. 6,087,298.

Applicants respectfully assert that the Examiner has not fully appreciated the differences between Sung et al. and the present invention. The present invention is characterized by three distinct regions sequentially arranged - a first zone of a NOx trapping catalyst (first region), a second zone of NOx trapping catalyst (second region), and a second catalyst for optimizing the reduction (third region). The sequential nature of these regions are ensured by the limitation "wherein the entire first zone is positioned upstream of the second zone." For the convenience of the Examiner, the relevant section of Figure 3 of the present invention is reproduced below with the three sequential regions labeled as is the flow direction:



Sung et al. does not disclose the entire first zone positioned upstream of 1 second zone as required by amended claims 1, 31, and 32. This is evident by inspection of Figure 3 from Sung et al. which is reproduced below with a label added for the upstream and down stream catalysts:



Clearly, Sung et al. only shows two sequentially arranged regions. Two regions are not the same as three regions. The Examiner attempts to remedy this glaring deficiency by pointing to the layer nature of the upstream and down stream catalysts. However, the limitation “wherein the entire first zone is positioned upstream of the second zone” precludes the application of such a construction to independent claims 1, 31, and 32 since Sung et al. does not disclose such an arrangement of the layers.

Accordingly, for at least these reasons, claims 1-20, 31, and 32 are allowable under 35 U.S.C. § 102(b) over Sung et al. Since Sung et al. fails to disclose such a limitation, claims 1-20 and 31-32 are allowable under 35 U.S.C. § 102(b) over Sung et al.

Claim 31 is rejected under 35 U.S.C. § 102 (b) as being anticipated by EP 1108863.

EP 1108863 does not disclose the sequential arrangement of a first and second zone on a single catalyst. The Examiner's statements that in sustaining the rejection, two **distinct** catalysts are being combined together to provide the functionality of independent claim 31. Applicants had previously amended claim 31 to clarify that the first and second zones must be contained within a single catalyst structure. Clearly, the use of one catalyst as compared to two distinct catalysts is a significant fabrication advantage. Accordingly, amended claim 31 is allowable under 35 U.S.C § 102 (b) over EP 1108863.

Claim 31 is rejected under 35 U.S.C. § 102(e) as being anticipated by Deeba et al., U.S. Patent No. 6,375,910.

Claim 31 is patentable under 35 U.S.C. § 102 (b) for precisely the same reasons stated above for EP 1108863. Specifically, the Examiner again has combined two **distinct** catalysts together to create the two zone single catalyst structure of the present invention. Accordingly, amended claim 31 is allowable under 35 U.S.C. § 102 (b) over U.S. Patent No. 6,375,910.

#### **Claim Rejections Under 35 U.S.C. § 103**

Claims 1-20 and 31-32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sung et al., U.S. Patent No. 6,987,298.

The allowability of claims 1-20, 31, and 32 over the Sung et al. reference has been discussed above. The Examiner only rejects these claims under 35 U.S.C. § 103(a) "[i]f it is considered that the disclosure of Sung et al. is not sufficiently specific to constitute anticipation...". However, as set forth above, Sung et al. fails to disclose the limitation - "wherein the **entire** first zone is positioned upstream of the second zone."


Accordingly, claims 1-20, 31 and 32 are allowable under 35 U.S.C. § 103(a) over Sung et al.

### **Conclusion**

Applicants have made a genuine effort to respond to each of the Examiner's rejections in advancing the prosecution of this case. Applicants believe that all formal and substantive requirements for patentability have been met and that this case is in condition for allowance, which action is respectfully requested. If a telephone or video conference would help expedite allowance or resolve any additional questions, such a conference is invited at the Examiner's convenience.

Applicants believe that no additional fees are required as a result of the filing of this paper. However, the Examiner is authorized to charge any additional fees or credits as a result of the filing of this paper to Ford Global Technologies, LLC's Deposit Account No. 06-1510 as authorized by the original transmittal letter in this case.

Respectfully submitted,  
**Haren S. Gandhi et al.**

By   
James W. Proscia  
Reg. No. 47,010  
Attorney/Agent for Applicant

Date: 11/24/07

**BROOKS KUSHMAN P.C.**  
1000 Town Center, 22nd Floor  
Southfield, MI 48075-1238  
Phone: 248-358-4400  
Fax: 248-358-3351